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Application Number: 09/945,179
Art Unit: 3762

In the claims:

1.   (currently amended) A method for detecting myocardial ischemia,
the method comprising:
    obtaining a first signal indicative of dynamic mechanical activity of a heart;
    obtaining a second signal indicative of electrical activity of the heart; and
    detecting myocardial ischemia based on both the first signal and the
second signal, and in the event a myocardial ischemia condition is detected,
notifying the patient.

    claims 2. to 24.   (canceled)

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25.   (currently amended)The method of claim 1, A method for detecting
myocardial ischemia, the method comprising:
        obtaining a first signal indicative of dynamic mechanical activity of a heart;
        obtaining a second signal indicative of electrical activity of the heart; and
        detecting myocardial ischemia based on both the first signal and the
second signal, further comprising determining a location of ischemic tissue based
on the first signal and the second signal.

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26.   (currently amended)The method of claim 1, A method for detecting
myocardial ischemia, the method comprising:
        obtaining a first signal indicative of dynamic mechanical activity of a heart;
        obtaining a second signal indicative of electrical activity of the heart; and
        detecting myocardial ischemia based on both the first signal and the
second signal, wherein the first signal includes a plurality of first signals, each of
the first signals indicating dynamic mechanical activity of the heart along one of a
plurality of axes, the method further comprising determining a location of
ischemic tissue based on the plurality of first signals.

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2̶7̶. (currently amended) The method of claim 26, wherein the second signal includes a plurality of second signals, each of the second signals indicating electrical activity of the heart along one of a plurality of axes, the method further comprising determining a location of ischemic tissue based on the plurality of first signals and the plurality of second signals.

claims 28. to 33.   (canceled)

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3̶4̶. (currently amended) T̶h̶e̶ ̶s̶y̶s̶t̶e̶m̶ ̶o̶f̶ ̶c̶l̶a̶i̶m̶ ̶2̶8̶,̶ A system for detecting myocardial ischemia, the system comprising:
     a first sensor that generates a first signal indicative of dynamic mechanical activity of a heart;
     a second sensor that obtains a second signal indicative of electrical activity of the heart; and
     a processor that detects myocardial ischemia based on both the first signal and the second signal, wherein the processor, when myocardial ischemia is detected, notifies the patient.

claims 35. to 49.   (canceled)

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5̶0̶. (currently amended)T̶h̶e̶ ̶s̶y̶s̶t̶e̶m̶ ̶o̶f̶ ̶c̶l̶a̶i̶m̶ ̶2̶8̶,̶ A system for detecting myocardial ischemia, the system comprising:
     a first sensor that generates a first signal indicative of dynamic mechanical activity of a heart;
     a second sensor that obtains a second signal indicative of electrical activity of the heart; and
     a processor that detects myocardial ischemia based on both the first signal and the second signal, wherein the processor quantifies a degree of ischemia based on the first signal and the second signal.

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51. (currently amended) ~~The system of claim 28,~~ A system for detecting myocardial ischemia, the system comprising:

a first sensor that generates a first signal indicative of dynamic mechanical activity of a heart;

a second sensor that obtains a second signal indicative of electrical activity of the heart; and

a processor that detects myocardial ischemia based on both the first signal and the second signal, wherein the processor determines a location of ischemic tissue based on the first signal and the second signal.

52. (currently amended) ~~The system of claim 28,~~ A system for detecting myocardial ischemia, the system comprising:

a first sensor that generates a first signal indicative of dynamic mechanical activity of a heart;

a second sensor that obtains a second signal indicative of electrical activity of the heart; and

a processor that detects myocardial ischemia based on both the first signal and the second signal, wherein the first signal includes a plurality of first signals, each of the first signals indicating dynamic mechanical activity of the heart along one of a plurality of axes, and the processor determines a location of ischemic tissue based on the plurality of first signals.

53. (original) The system of claim 52, wherein the second signal includes a plurality of second signals, each of the second signals indicating electrical activity of the heart along one of a plurality of axes, and the processor determines a location of ischemic tissue based on the plurality of first signals and the plurality of second signals.

54. (cancelled)

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~~55.~~ (currently amended) ~~The system of claim 28,~~ A system for detecting myocardial ischemia, the system comprising:

a first sensor that generates a first signal indicative of dynamic mechanical activity of a heart;

a second sensor that obtains a second signal indicative of electrical activity of the heart; and

a processor that detects myocardial ischemia based on both the first signal and the second signal, wherein the first sensor includes a multi-axis accelerometer and the first signal includes a plurality of heart acceleration signals, each of the heart acceleration signals indicating contractile acceleration along one of a plurality of axes, the processor determining a location of ischemic tissue based on the heart acceleration signals.

56. to 67.   (canceled)